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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/091,514	03/07/2002	Fumio Tajima	381NP/48224CO	1645

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CROWELL & MORING, LLP
Intellectual Property Dept.
P.O. Box 14300
Washington, DC 20044-4300

EXAMINER
NGUYEN, TRAN N

ART UNIT	PAPER NUMBER
2834	

DATE MAILED: 07/25/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/091,514	TAJIMA ET AL.	
	Examiner	Art Unit	
	Tran N. Nguyen	2834	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- *Extensions of time may be available under the provisions of* 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☐ Claim(s) 1 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) 1 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☒ Certified copies of the priority documents have been received in Application No. 09/400437 .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. **Claim 1** is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, lines 6-7, "the circumferential direction" lacks antecedent basis.

In claim 1, "said rotor core is divided in the circumferential direction in a unit of each of the projecting poles and each of the core yokes opposite to each of the pole" is indefinite because it is unclear how the whole core being divided in a (single) unit. Should it be "*said rotor core is divided in the circumferential* ***direction into a plurality of units, wherein each of said unit having*** *each of the projecting poles and each of the core yokes opposite to each of the pole*"?

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321© may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claim 1 is rejected under the judicially created doctrine of double patenting over claim 1 of **pending patent application *09/400,437*** since the claims, if allowed, would improperly extend the "right to exclude" already granted in the patent . (See ***In re Schneller***, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804).

The subject matter claimed in the instant application is fully disclosed in the patent and is covered by the pending patent application *09/400,437* since the patent application 09/400437, and the present application are claiming common subject matter, as follows: a rotor core comprising a plurality of projecting poles being arranged, in a circumferential direction, in a side of a gap between the rotor and a stator; and a plurality of rotor yokes for forming a magnetic path conducting magnetic fluxes of each of the projecting poles, *and particularly the rotor core is divided in the circumferential direction into a plurality of divided core portion units of respective each of the projecting poles and each of the rotor yokes.*

Furthermore, there is no apparent reason why applicant was prevented from presenting claims corresponding to those of the instant application during prosecution of the application which matured into a patent. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

Obviousness-type Double Patenting

The non-statutory double patenting rejection, whether of the obviousness-type or non-obviousness-type, is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the

"right to exclude" granted by a patent. *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); and *In re Goodman*, 29 USPQ2d 2010 (Fed. Cir. 1993).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(b) and © may be used to overcome an actual or provisional rejection based on a non-statutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.78(d).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claim 1 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of pending patent application *09/400,437* in view of Suzuki (US 5786651) now is Pat # 6452302

The subject matter claimed in the instant application is fully disclosed in the patent and is covered by the pending patent application *09/400,437* since the patent application 09/400437, *particularly the rotor core is divided in the circumferential direction into a plurality of divided core portion units of respective each of the projecting poles and each of the rotor yokes*. The present application differs from the pending application 09/400437 in only one respect that is the circumferentially divided unit having each of the projecting poles and each of the rotor yokes while the pending patent application *09/400,437* claim 1 further limits the circumferentially divided unit having each of the projecting poles and each of the rotor yokes by reciting that the adjacent ones of the divided rotor cores, i.e., the adjacent respective circumferentially divided rotor yoke portions and the rotor pole portions, forming a respective one of the magnetic poles.

Suzuki, however, teaches a magnetic core having a plurality of circumferentially divided units, each of which having each of the projecting poles and each of the core yokes. Even though Suzuki teaches a stator core, those skilled in the art would understand that the essential teaching of the Suzuki ref is that a magnetic core can be configured by a plurality of

circumferentially divided core units, each of the units can be configured by having a single undivided pole portion and a yoke portion. This would provide a magnetic core with no magnetic leakage in each pole portion since the pole is an integral part instead of a pole with divided portions therebetween. Thus, the pole and the core would have high structure integrity and efficiently assembled during manufacturing process.

Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the pending application 09/400437 circumferential divided rotor core by embodying the core as a plurality of circumferential divided core units, each unit having respective each of core yoke and each of core poles, as taught by Suzuki. Doing so would provide a rotor core with good magnetic property, high structure integrity and efficiently assembled during manufacturing process.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kirtley (US 3999093) or Ross (US 2774000) in view of level of ordinary skills of a worker in the art.

Kirtley (fig 6) discloses a magnetic core having a plurality of projecting poles and a plurality of yokes for forming a magnetic flux conducting of each of the poles, wherein the magnetic core is circumferentially divided in a unit of each of the projecting poles and each of the core yokes opposite to each of the pole.

Ross (fig 2) discloses a magnetic core having a plurality of projecting poles and a plurality of yokes for forming a magnetic flux conducting of each of the poles, wherein the magnetic core is

circumferentially divided in a unit of each of the projecting poles and each of the core yokes opposite to each of the pole.

Kirtley, or Ross, substantially discloses the claimed invention, except that Kirtley or Ross discloses a magnetic core for a stator assembly instead of rotor assembly. Those skilled in the art would realize that the important teaching of either Kirtley or Ross is about a magnetic core having a plurality circumferential divided units, each of the unites having a yoke and a pole. The Kirtley's or Ross's magnetic core can be used as a stator core or the rotor core because generally it is a magnetic core having high magnetic characteristics, since no magnetic leakage in each pole portion since the pole is an integral part instead of a pole with divided portions therebetween, and high structure integrity.

Furthermore, the intended use of the claimed invention, that is using the magnetic core as a rotor core instead of a stator core, as disclosed by the refs, must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

Thus, it would have been obvious to one skilled in the art at the time the invention was made to embody the magnetic core, as taught by Kirtley or Ross, as a rotor magnetic core because the core would provide a rotor assembly with high magnetic characteristics and high structural integrity resulting in improved performance of the rotor assembly as well as reliability of the rotor assembly.

Communication

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tran N Nguyen whose telephone number is (703) 308-1639. The examiner can normally be reached on M-F 6:00AM-2:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on (703)-308-1371. The fax phone numbers for the

organization where this application or proceeding is assigned are (703)305-3431 for regular communications and (703)-395-3432 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)-308-1782.

TRAN NGUYEN
PRIMARY PATENT EXAMINER
TC-2800